

Practice

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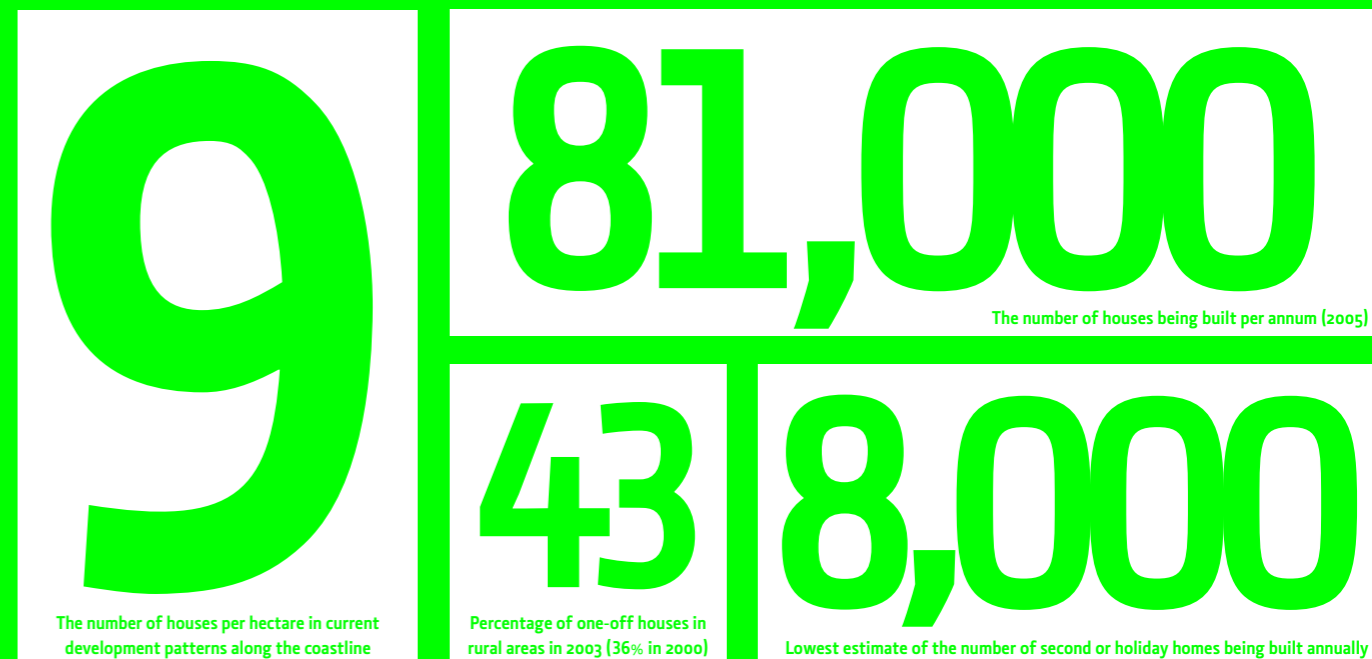
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Tideaways—Expanding tourism and leisure: The current rural building boom is fuelled by an increasing population, keen to express its increasing wealth in built form. One third of all existing houses in Ireland have been built since 1995, and most of these are outside major urban centres. Every year, one in three new houses is a ‘one-off’ house in a rural location, and up to one in eight is built as a second or holiday home. It is estimated that there are already 200,000 second or holiday homes in the Republic of Ireland, approximately one for every twenty people. **HOUSING DEMAND:** Much of the current housing demand is in coastal locations and seaside towns. The coastline is a limited and valuable resource. The whole island encompasses 3,172km of coastline for 5.2m people (6.8m in 2030), representing 0.61 (0.47) metres of coast per person. The coastline is under pressure, and ‘continuation of current trends will lead to deterioration in the coastal environment, both visually and physically’ (Coastal Zone Management, Spatial Planning Unit, Department of the Environment and Local Government, May 2001). **THE DILEMMA OF TOURISM:** As one of the most conspicuous manifestations of contemporary tourism in Ireland, the holiday home lies at the crux of the conflict between coastal landscape preservation and development. In regions increasingly reliant on the tourism industry, planners must balance the environmental impact of such dwellings against the income they generate for the local economy. **THE RUNDALE SYSTEM:** Drawing on the historic Rundale system of land sharing, Tideaways proposes a transformation of affluent leisure, its social experience and its environmental impact. Instead of further expansion, development is condensed at strategic locations along the coastline. Settlement extends onto the coastal shelf to include floating, seasonally-removable elements. Living spaces move with the ebb and flow of the tide, sometimes exposed, sometimes concealed, and provide continually changing views and shifting configurations of outdoor spaces. Paths unexpectedly cross, short cuts emerge, and residents find they are suddenly neighbours. The restorative qualities of the natural elements, and their interactions with social arrangements, are greatly amplified in this responsive kinetic landscape.

Tideaways





'The coastal zone will remain under pressure from second and holiday homes given the buoyant economy. It is clear however that continuation of current trends will lead to deterioration in the coastal environment, both visually and physically'

Coastal Zone Management, Spatial Planning Unit,
Department of the Environment and Local Government, May 2001

The dilemma of tourism

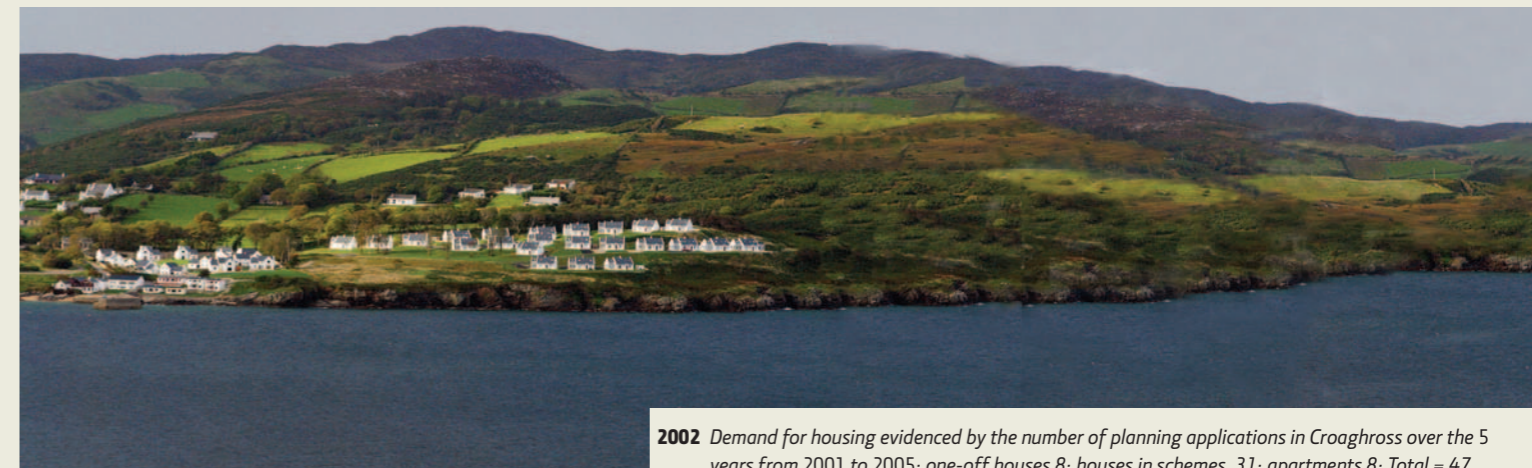
The beauty of the Irish coastline is a huge attraction and a key driver of our tourism industry. Visitors require accommodation, and the desired model is a holiday or second home. Yet, the proliferation of these holiday homes has the potential to destroy the very landscape that attracts people in the first place. Despite being in use only 10-20% of the year, these buildings are visible 100% of this time.

As the decline of fishing industries, small farms and indigenous industry along the western seaboard depletes the area of its population and economic means of existence, tourism becomes a vital aspect to the survival of communities in these areas. If planning authorities are to control holiday development in rural and coastal areas, they must offer a development model which facilitates construction of holiday houses in an environmentally and socially sustainable way.

Loss of coastline—Portsalon—2000, 2002, 2030



2000 Portsalon—small town on the west shore of Lough Swilly, Co. Donegal, townland of Croaghcross; permanent population estimated at 300 to 500.



2002 Demand for housing evidenced by the number of planning applications in Croaghcross over the 5 years from 2001 to 2005: one-off houses 8; houses in schemes, 31; apartments 8; Total = 47.



2030 Similar demand over the coming years would result in an additional 80 units by 2015 and a further 93 units by 2030 within the extent of land shown i.e. two-thirds of the townland of Croaghcross.

Concept

Developing the Tideaway model

Current holiday homes are based on the idea of the 'hideaway'—a retreat or refuge from everyday life. However, the cumulative effect of so many holiday houses has a potentially devastating effect on the everyday life of coastal areas. This project seeks to reimagine the holiday home as more integrated with the coastal locations and their natural and social cycles, as a 'tideaway' rather than a 'hideaway'.



Rundale system Tory Island
 'A form of joint occupation of land, each joint holder occupying and cultivating several small strips or patches not contiguous to each other.'
 'Intelligent functional adaptation to a specific set of ecological & demographic circumstances.'
 Oxford English Dictionary, Oxford University Press 1973

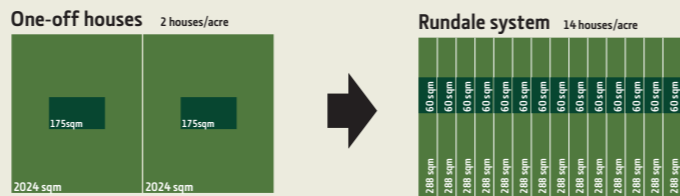
Rundale system Rutland Island



Condense

Rediscovering a forgotten system of land distribution—the Rundale system

The Tideaway concept proposes an alternative model for the development of holiday homes along the coast. Using the Rundale system of land distribution, the precious coastline is shared more equitably and sustainably, using less land and allowing more than one dwelling to get the same sea views and stretch of coast line.

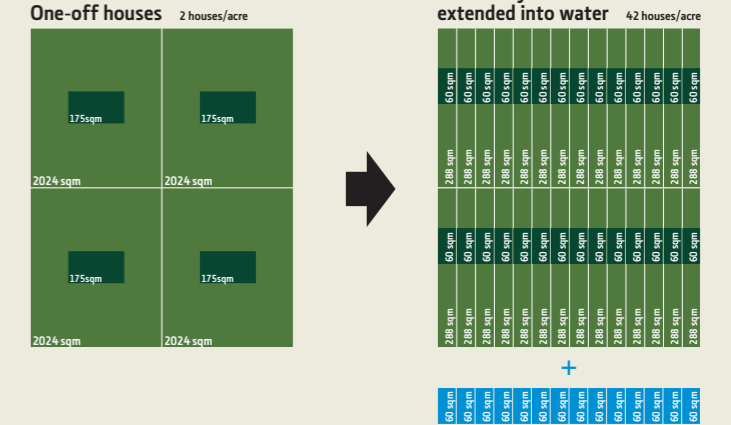


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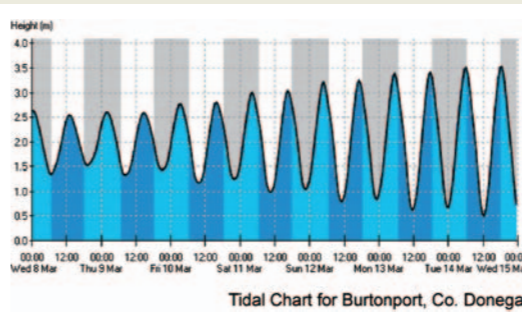
Extend

Enlarging the plot—utilising the water as an extended building area

The Tideaway model proposes a development density of 52 units per hectare (21 per acre). The typical existing holiday home development has a density of 9 dwellings per hectare (3.6 per acre), as illustrated by the development of Portsalon. Each dwelling occupies the equivalent of 2 metres of coastline. In current patterns of holiday home development, each cottage typically occupies the equivalent of 11 metres of coastline.



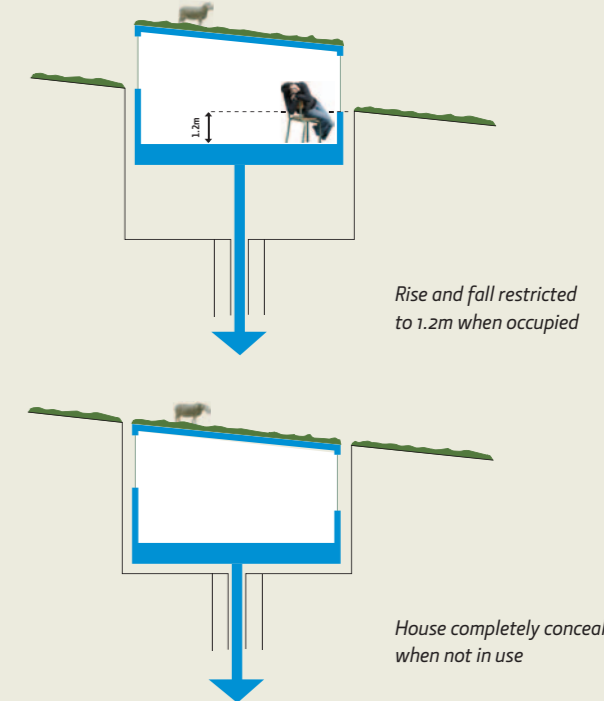
Extend



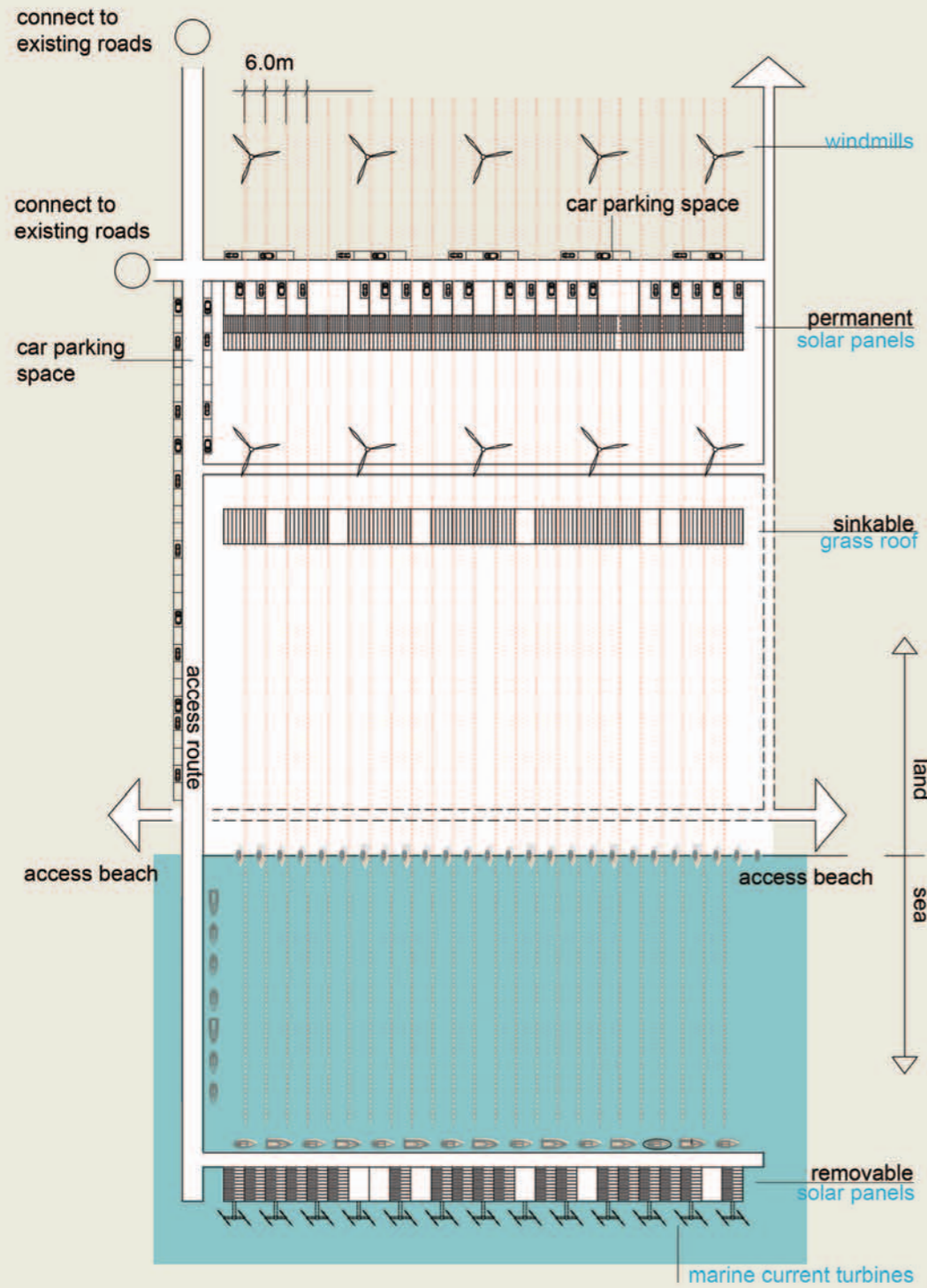
Conceal

Part-time use = part-time visibility—utilizing tidal forces to move the houses

The Tideaway project seeks to address the issue of holiday house developments, which are vacant for 80% to 90% of the time but, being visible 100% of the time, cause such intrusion to visual amenity. Three rows of dwellings are built parallel to the coast—a row of permanent terraced cottages, a row of dwellings which move up and down with the tide (disappearing underground when not in use) and a row of floating homes on pontoons in the water (which are removed for safe storage when not in use). Like the Rundale system of land distribution, all three rows share the same piece of coastline and, as the houses move up and down with the tide, they share the same views of the sea.

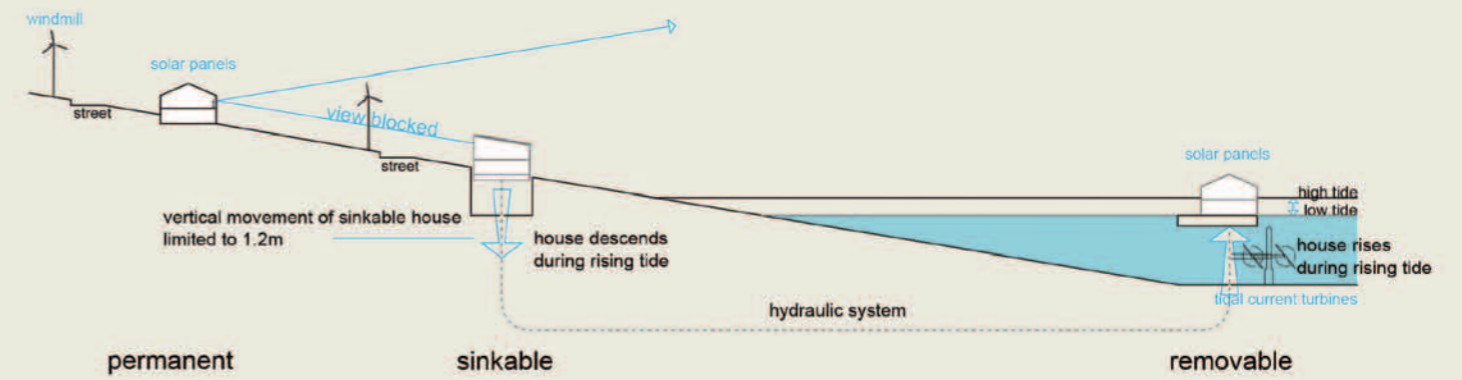


Conceal

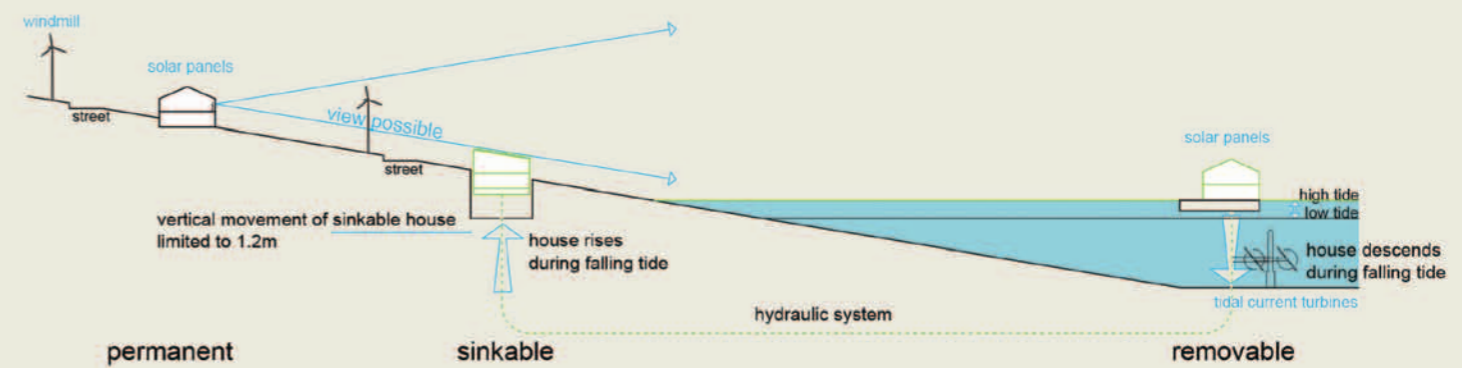


The Tideaway module

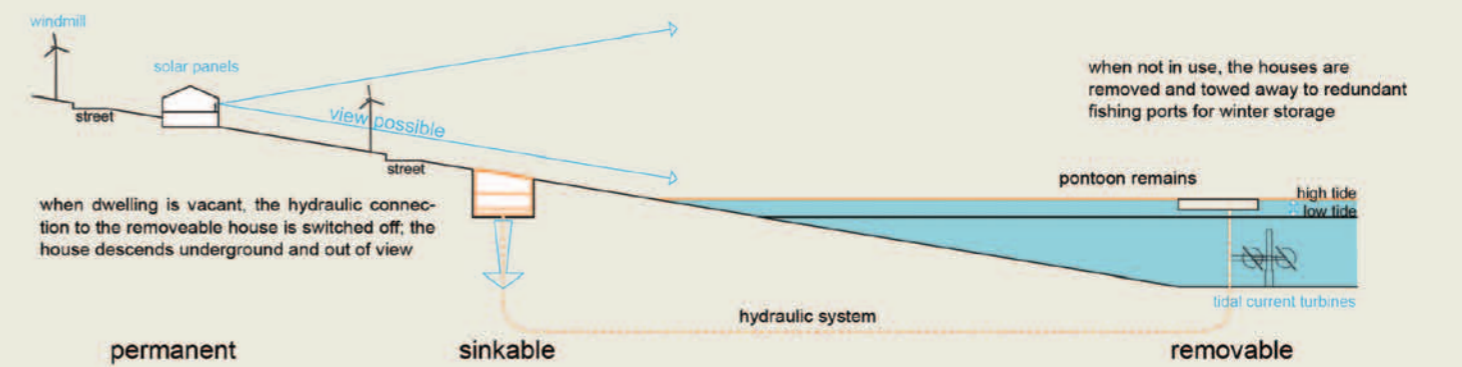
Using the force of nature – moving houses



Low tide—in occupation

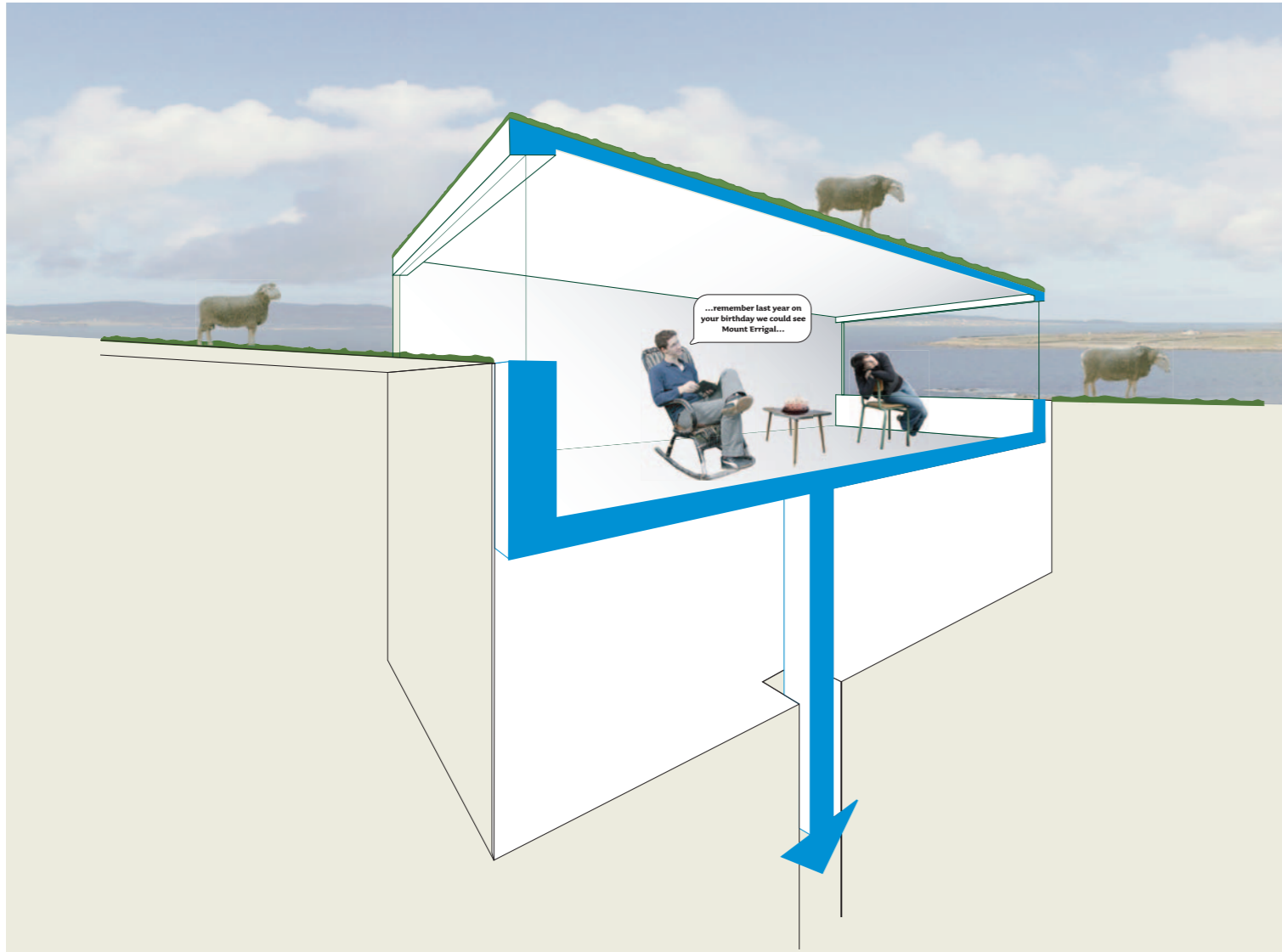


High tide—in occupation



Empty—any state of tide

when not in use, the houses are removed and towed away to redundant fishing ports for winter storage

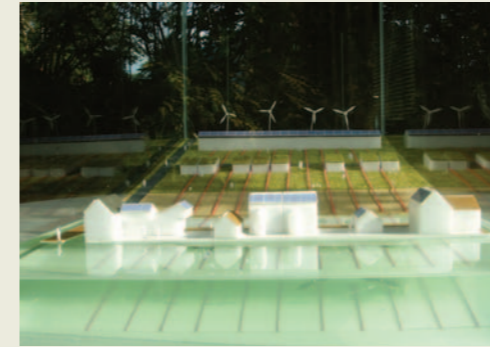


**Living within the course of nature—
a unique holiday experience**

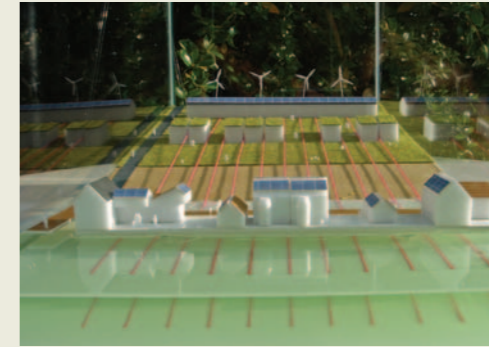
The Tideaway houses rise and fall with the tide and as such they connect the inhabitants closer to nature and the universe (it is the gravitational forces of the moon and the sun that create the tides). This connection with nature further enriches the holiday experience. The residents in the sinkable houses experience an ever-changing view as their houses rise up and down with the tide. They live in a moving landscape that reinforces the connection to place and landscape.

Implementation—how and where does the module work?

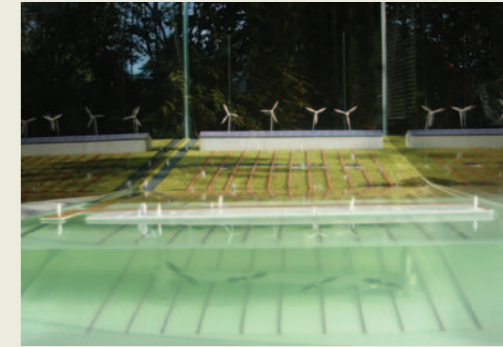
The Tideaway development model suits locations on inlets that are protected from exposed ocean swells, which is typically where villages along the Irish coastline are located. Locations with a rise and fall of tide not exceeding 2m are ideal. The mean rise and fall of the tide along the coast of Ireland is 2.2m. The module is easily adaptable to various landscape formations and extendable to suit local demand.



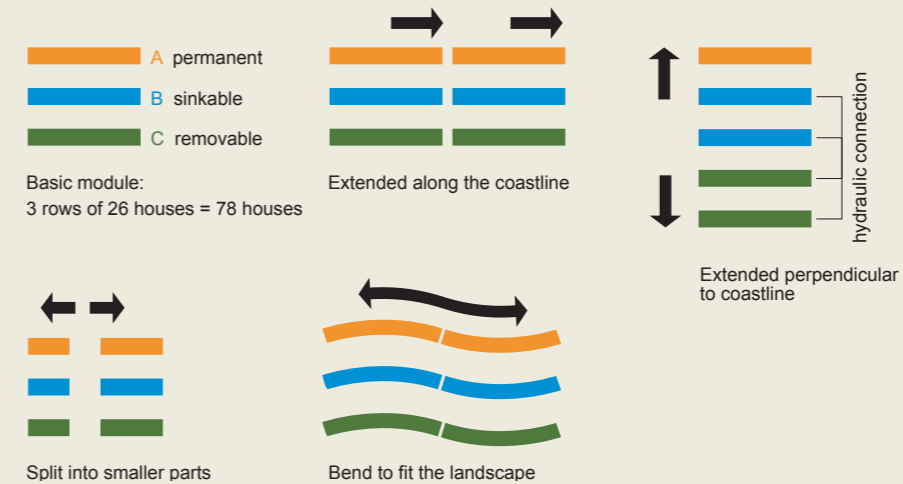
Holiday season—houses in occupation, high tide



Holiday season—houses in occupation, low tide



Off-season—sunken and removed houses, all tides



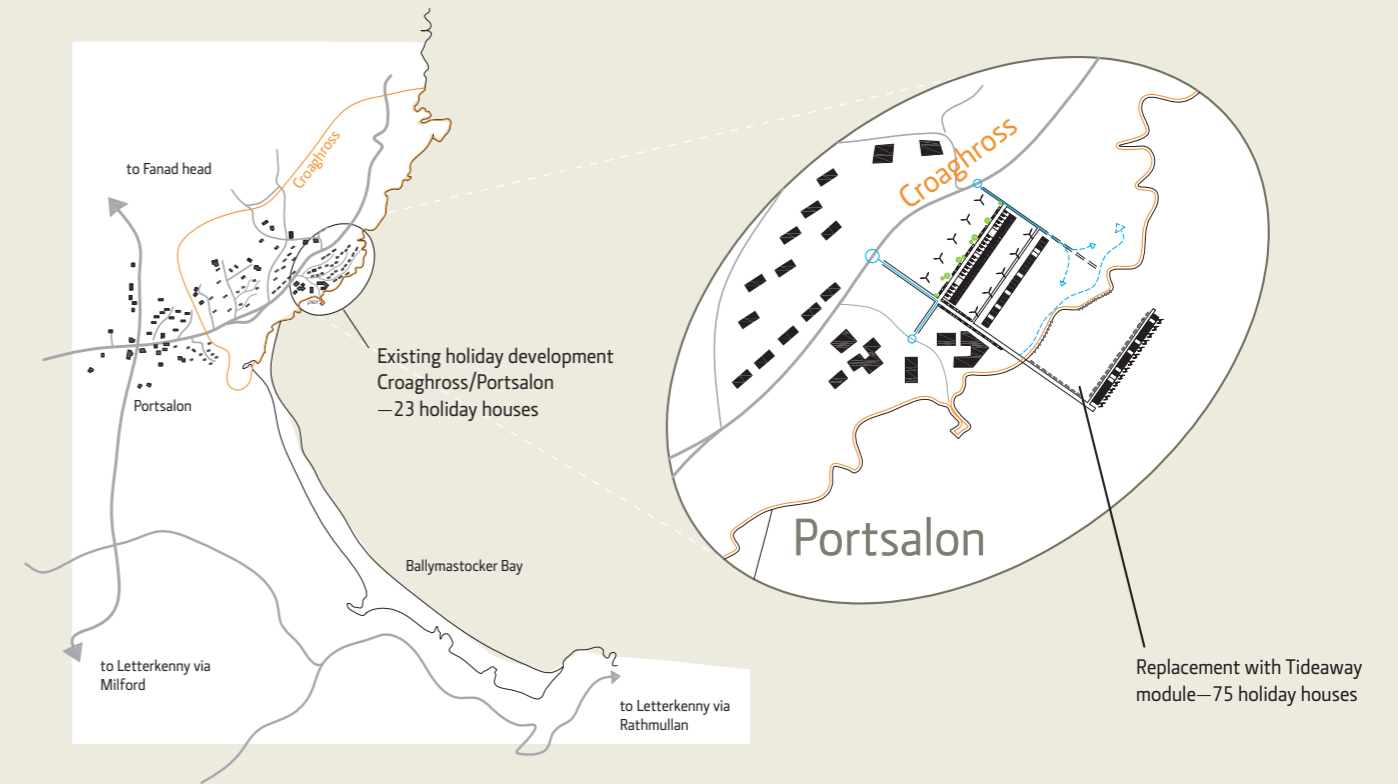
Capacity	
Number of dwelling units in a single Tideaway module	78
Number of dwelling units in a single Tideaway module placed in 16 locations	1,248
Number of dwelling units if the module is doubled	2,496
Number of dwelling units if the module is doubled and extended to 5 rows	4,160



- ||| Tideaway modules
- |||| Extended Tideaway module
- (h) Redundant fishing harbours suitable for winter storage of removable houses

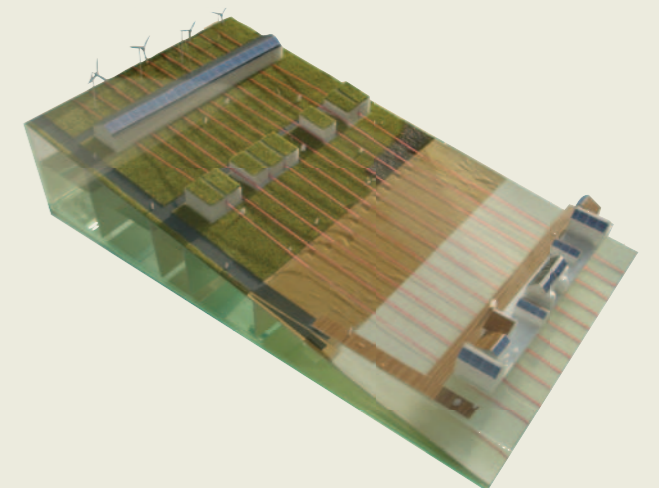
Macroscale—suitable locations for Tideaway modules

Sheltered from strong Atlantic seas
Close to redundant fishing harbours for off-season storage of removable houses



Microscale—plug into existing village

The Tideaway module ties into existing village infrastructure. Its mix of holiday and permanent homes creates a symbiotic relationship with the existing village.



2030 Portsalon—196 new houses (the projected demand for this area by 2030) utilising the Tideaway model of development instead of the current one-off house pattern of development. See page 109 for comparison